1	2	3	4
4. Gujarat	2·52	1·27	0·29
5. Haryana	1·22	1·13	0·38
6. Himachal Pradesh	2·84	0·03	0·04
7. J & K	4·56	4·50	4·50
8. Karnataka	2·75	1·16	0·29
9. Kerala	1·33	0·63	1·35
10. Madhya Pradesh	2·98	1·76	0·66
11. Maharashtra	7·04	5·25	1·32
12. Manipur	0·02	0·02	·004
13. Orissa	1·74	1·46	1·24
14. Punjab	1·38	1·01	0·26
15. Rajasthan	6·19	4·34	0·75
16. Tamil Nadu	1·77	1·40	1·16
17. Tripura	0·02	0·02	0·014
18. Uttar Pradesh	5·30	3·60	3·09
19. West Bengal	12·61	9·11	19·91
20. D&N Haveli	0·09	0·06	0·03
21. Delhi	0·01	0·003	0·006
22. Pondicherry	0·02	0·01	0·01

Linkage between C.S.I.R. and industry

801. MISS SAROJ KHAPARDE; Will the PRIME MINISTER be pleased to state:

(a) whether Government are aware that the linkage between the C.S.I.R. and the industry is inadequate;

(b) whether Government are also aware that many industries are completely ignorant of the capabilities and the facilities . of the C.S.I.R.; and

(c) if so, the details of the steps Go vernment propose to take to strengthen the linkage between the C.S.I.R. and the industry?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) to (c) The CSIR has a strong and functional linkage with industry. Industry is represented on all the high level Committees of CSIR dealing with policy formulation;, R&D planning and implementation. The Research Council of each CSIR Laboratory has representatives from industries which ensures result-oriented research projects. Many CSIR laboratories are represented on the Science and Technology Committees of various departments of the Government which sponsor industry oriented research projects. Some CSIR Scientists are also on research committees of public sector organisations which enables them to understand the problems of industry, A substantial part of the sponsored research comes to CSIR from the Industry.

Among other initiatives, CSHR organises periodic get-togethers with user industry to make known its R&D and infrastructural Capabilities. In addition, the laboratories publicise the expertise in their specific areas through publications, workshops, seminars and open days etc. for entrepreneurs. The strength of the ongoing linkages between the CSIR and Industry is borne out by the fact that many of the major CSIR technologies in use by industry have been developed through coHafcorative/sponsored R&D progTahncs.

To further strengthen its linkage with industry, CSIR has initiated machanisms for interaction with industry organisations like FICCI, Confederation of Engineering Industries (OBI) etc.

Efficacy trial of birth control vaccine

802. KUMARI ALIA: Will the PRIME MINISTER be pleased to state:

(a) whether a Birth Control Vaccine for women has been developed by the Scientists of National Institute of Immunology;

(b) if so, whether Government have permitted for its efficacy trials; and

(c) if so, the number of women who have gone for trials so far and the results thereof?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) Yes, Madam.

(b) Yes, Madam. Based on toe successful completion of the Phase I trials in female human volunteerei, the Drag Controller of India granted permission t_0 start Phase II efficacy trials.

(c) A total of 110 women volunteers of proven fertility have been enrolled for trials. Till date, a total of 490 menstrual cycles have been recorded without any pregnancy.

Overestimation of India's contribution to green hoose gases

803. SHRI SANTOSH BAGRODIA: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that accord ing to a study by CSIR U.S. enviroa-mentad protection agency has overesti mated India's contribution to greenhouse gases that are warming the earth; and

(b) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) and (b) According to the preliminary studies made by Council of Scientific and Industrial Research (CSIR), it is found that values for carbon dioxide emissions in India are lower by 16 per cent and that of methane emissions lower by 33 per cent in case of live stock and lower by 92 per cent in case of rice paddies as compared to the estimates of U.S. Environmental Protection Agency. These variations are mainly due to uncertainties in measurements in India and elsewhere which vary over different geographical conditions.

12.00 Noon

The Deputy Chairman in the Chair)